

CLAIM SUMMARY DOCUMENT

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CLAIMS WE CLAIM:

1. (Currently Amended) ~~Method of preventing blockages of the flow paths of a separator when processing a fat-containing initial product, particularly milk, having the steps of~~

~~A) determining the concentration of the fat content of an outflowing product phase for detecting an imminent clogging, and~~

~~B) when a defined fat content limit value has been reached or exceeded, shifting the separation zone in the separator drum for a defined minimum time period by changing the operating parameters, for preventing a clogging.~~ A method of preventing blockages of flow paths of a separator, the separator processing a fat-containing product such as milk, the method steps comprising:

determining a concentration of the fat content of an outflowing product phase from the separator to detect an imminent clogging; and

shifting a separation zone in a separator drum of the separator for a defined minimum time period by changing operating parameters when a defined fat content limit value is one of reached and exceeded.

2. (Currently Amended) ~~Method~~ The method according to Claim 1, characterized in that ~~it is used when separating~~ wherein the fat-containing product is cold milk and the cold milk is separated into cream and skimmed milk.

3. (Currently Amended) ~~Method~~ The method according to Claim 2, characterized in that wherein the cold milk ~~of has~~ a temperature of 2-15°C, particularly 4-10°C, and is separated into cream with having a fat content of 28-45% and into skimmed milk.

4. (Currently Amended) ~~Method~~ The method according to Claim 1, characterized in that wherein the separation zone in the drum is shifted toward the an interior of the drum when a the fat content limit value has been one of reached or is and exceeded.

5. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in Claim 1, wherein the determination determining of the concentration of the fat content takes place by ~~means of~~ a mass flow meter.

6. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that, when determining the fat content, a~~ Claim 5, wherein the mass flow meter ~~is used which has a separate density output.~~

7. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that~~ Claim 1, wherein the separation zone in the drum is shifted toward the ~~an~~ interior of the drum by a throttling of a valve in ~~the~~ a skimmed milk outlet.

8. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that~~ Claim 7, wherein the throttling of the valve in the skimmed milk outlet takes place by ~~means of~~ a timer for a defined time period.

9. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that~~ Claim 1, wherein the separation zone is shifted by an increase of ~~the~~ an inflow rate.

10. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that~~ Claim 9, wherein the inflow rate is increased within a time period of from 5-60 seconds.

11. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that~~ Claim 9, wherein the inflow rate is increased within a time period of from 5-20 seconds.

12. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, characterized in ~~that~~ Claim 9, wherein the inflow rate is increased by 5-40%.

13. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding~~ claims, ~~characterized in that~~Claim 9, wherein the inflow rate is increased by 5-20%.

14. (Currently Amended) ~~Device~~ A device for implementing the method according to ~~one of the preceding claims, having of~~ Claim 1, the device comprising a separator for processing ~~the milk, characterized by~~ and further comprising a measuring and control device

C) for detecting an imminent clogging by ~~means of a determination of~~determining the concentration of the fat content of an outflowing product phase~~[[;]]~~ and

D) for changing the operating parameters of the separator when a defined fat content limit value has been one of reached ~~or~~ and exceeded, ~~which is~~ such changing of the operating parameters being designed for shifting the separation zone in the separator drum for a ~~the~~ defined minimum time period ~~by changing the operating parameters~~, for preventing a clogging.

15. (Currently Amended) ~~Device~~ The device according to Claim 14, characterized in ~~that~~wherein the separator is a cold milk separator having an inlet (1) for cold milk, ~~as well as~~ an outlet (4) for skimmed milk and a cream outlet (5), and an analyzer (6) being is arranged in the cream outlet (5), by ~~means of which~~ analyzer the ~~cream concentration~~ the fat content of the cream ~~can be~~ is determined.

16. (Currently Amended) ~~Device~~ The device according to Claim 14 or 15, characterized in ~~that~~wherein the analyzer (6) is connected with a control input of a control valve (7) in the skimmed milk outlet.

17. (Currently Amended) ~~Device~~ The device according to Claim 16, characterized in ~~that~~15, wherein the analyzer (6) is connected with a device for controlling ~~the~~ an inflow rate of cold milk into the separator.

18. (Currently Amended) ~~Device~~ The device according to ~~one of~~ Claims 14 to 17, characterized by Claim 14, wherein the control valve is controlled by a timer.

19. (Currently Amended) ~~Device~~ The device according to one of Claims 14 to 18, characterized in thatClaim 15, wherein the inlet (1) extends ~~at the~~from a bottom of the separator into a separator drum (10) withhaving a vertical axis of rotation.

20. (Currently Amended) ~~Device~~ The device according to one of Claims 14 to 19, characterized byClaim 15, wherein the separator includes a swirl space (13) on a separating disk (12) and a regulating disk (14) withhaving a diameter larger than ~~the~~a gripper chamber cover (15), which swirl disk, regulating disk and gripper chamber cover are arranged in a path to the skinned milk outlet.

21. (New) The method of Claim 2, wherein the cold milk has a temperature of 4°-10°C and is separated into cream having a fat content of 28-45% and into skimmed milk.